

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,597	11/14/2001	Kenji Ose	SIC-00-001-4	3657

7590 12/12/2002

DELAND LAW OFFICE  
P.O. Box 69  
Klamath River, CA 96050-0069

EXAMINER

KIM, CHONG HWA

ART UNIT	PAPER NUMBER
----------	--------------

3682

DATE MAILED: 12/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,597

Applicant(s)

OSE, KENJI

Examiner

Chong H. Kim

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-37,40-47 and 49-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-37,40-47 and 49-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Nov 13, 2002 has been entered.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 34, 36, 40-47, 49-53, and 56-60 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang et al., U.S. Patent 5,588,331.

Huang et al. shows, in Figs. 2-4, a bicycle shift control device comprising;

a base member 20;

a rotatable dial 30, 40 coupled to the base member 20 for rotation around a rotational axis (along the handlebar), wherein the rotatable dial is exposed to the outside;

a finger contact projection (a distal portion of the dial 30 from the portion 40) extending from the rotatable dial in a direction of the rotational axis;

Art Unit: 3682

wherein the finger contact projection is structured to prohibit the extension of a finger between all portions of the finger contact projection and the rotatable dial;

a shift element coupler 50, 51 disposed with the rotatable dial;

wherein at least one of the dial and the base member includes a coupling projection 21 for coupling the dial to the base member;

wherein the rotatable dial and the finger contact projection are one piece;

wherein the base member includes a cable guide 60 having a cable guide opening for receiving a cable 70 therethrough;

further comprising an attachment band 24 extending from the base member, wherein the attachment band has a substantially cylindrical shape;

wherein the attachment band includes a first mounting hole 25 that aligns with a second mounting hole (that is formed in the extension 21);

wherein the shift element coupler is attached to the rotatable dial 40;

wherein the shift element coupler is fitted within a coupler bore 41 formed in the rotatable dial;

wherein the shift element coupler includes a cable end bead receiving opening (at the element 50);

wherein the shift element coupler has a substantially cylindrical shape 51, and wherein the cable end bead receiving opening extends diametrically through the shift element coupler;

a motion limiting structure 26, 45, 46 coupled to the base member and to the rotatable dial that limits a range of rotation of the rotatable dial relative the base member to a predefined

Art Unit: 3682

arc, and wherein the rotatable dial moves unobstructively within the predefined arc between a cable pulled position and a cable released position;

wherein the motion limiting structure comprises a motion stop 26 that cooperates with a first limit stop 45 and a second limit stop 46;

wherein the motion stop 26 extends from the base member 20;

wherein the first limit stop 45 and the second limit stop 46 are disposed on the rotatable dial;

wherein the rotatable dial includes a motion limiting groove (between the stops 45 and 46 in Fig. 4) that forms the first limit stop 45 and the second limit stop 46; and

wherein the finger contact projection comprises a first finger contact surface (a portion of the surface on the element 30 that faces perpendicularly out of the paper) facing in a direction substantially perpendicular to the rotational axis, wherein the first finger contact surface at least partially forms a continuous surface with the rotatable dial; and a second finger contact surface (a portion of the surface on the element 30 that faces perpendicularly into the paper) facing in a direction substantially perpendicular to the rotational axis and opposite the first finger contact surface, wherein the second finger contact surface at least partially forms a continuous surface with the rotatable dial.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 3682

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami et al., U.S. Patent 5,601,001.

Kawakami et al. shows, in Figs. 1-3, a bicycle shift control device comprising;

a base member 10;

a rotatable dial 7 coupled to the base member 10 for rotation around a rotational axis X;

a motion limiting structure (the portion that allows two limiting positions, U and D)

coupled to the base member and to the rotatable dial that limits a range of rotation of the rotatable dial relative the base member to a predefined arc;

a finger contact projection 4a, 4b extending from the rotatable dial in a direction of the rotational axis;

wherein the finger contact projection is structured to prohibit the extension of a finger between all portions of the finger contact projection and the rotatable dial;

a shift element coupler (inherently shown to hold the wire 8a) disposed with the rotatable dial;

wherein the finger projection extends at least partially in a direction perpendicular to the rotational axis X;

but fails to show the rotatable dial being exposed to the outside.

It would have been obvious to modify Kawakami et al. by having the rotatable dial exposed to the outside with a , since applicant has not disclosed that having the dial exposed to the outside solves any stated problem or is for any particular purpose and it appears that the

Art Unit: 3682

bicycle shift control would perform equally well with the dial being hidden in the housing or being exposed to the outside through a transparent housing.

6. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al.

Huang et al. shows, as discussed above in the rejection of claims 34 and 36, the bicycle shift control device comprising the coupling projection formed on the base member for coupling the base member into the opening in the dial, but fails to show the coupling projection disposed on the dial and extending into an opening in the base member.

It would have been obvious to one having ordinary skill in the art to form the coupling projection and the opening of Huang et al. on the dial and the base member, respectively, since it has been held to be within the general skill of a worker in the art to reverse or rearrange parts. In re Japikse, 86 USPQ 70 (CCPA 1950).

7. Claims 34, 36, 37, 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wechsler, U.S. Patent 3,965,763 in view of White et al., U.S. Patent 3,398,600.

Wechsler shows, in Figs. 1-3, a bicycle shift control device comprising;

a base member 33;

a rotatable dial 22 coupled to the base member 33 for rotation around a rotational axis (along the handlebar), wherein the rotatable dial is exposed to the outside;

a motion limiting structure 37, 38 coupled to the base member and to the rotatable dial that limits a range of rotation of the rotatable dial relative the base member to a predefined arc;

Art Unit: 3682

a finger contact projection 32 extending from the rotatable dial in a direction of the rotational axis;

wherein the finger contact projection is structured to prohibit the extension of a finger between all portions of the finger contact projection and the rotatable dial;

a shift element coupler disposed with the rotatable dial (column 4, lines 46-50);

wherein at least one of the dial and the base member includes a coupling projection 34 for coupling the dial to the base member;

wherein the coupling projection 34 is disposed on the dial and extends into an opening in the base member (see Fig. 4);

but fails to show the coupling projection includes a slot and a locking abutment.

White et al. shows, in Figs. 4 and 5, a rotatable dial 26 comprising a coupling projection 22 having a slot 34 that allows the coupling projection to be compressed and wherein the coupling projection includes a locking abutment 40 facing the rotatable dial 26 for locking the rotatable dial to the base member.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the coupling projection of Wechsler with the snap-in coupling projection as taught by White et al. in order to provide a simpler design wherein the tolerances between the projection and the receiving end need not be accurately controlled, as described in column 2, lines 1-2 of White et al. so that the cost of manufacturing can be reduced.

***Response to Arguments***

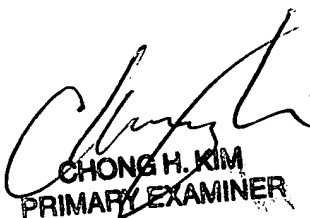
8. Applicant's arguments with respect to claim 34-37, 40-47, and 49-60 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chong H. Kim whose telephone number is (703) 305-0922. The examiner can normally be reached on Monday - Friday; 9:00 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on (703) 308-3668. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

chk  
December 10, 2002

  
CHONG H. KIM  
PRIMARY EXAMINER